



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/016,274

10/30/2001

Darius J. Preisler

VEI 0368 PUS

4361

22045

7590

07/09/2004

BROOKS KUSHMAN P.C.  
1000 TOWN CENTER  
TWENTY-SECOND FLOOR  
SOUTHFIELD, MI 48075

EXAMINER

COLETTA, LORI L

ART UNIT

PAPER NUMBER

3612

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/016,274

Applicant(s)

PREISLER, DARIUS J.

Examiner

Lori L. Coletta

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2001 and 11 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11, 14, 15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by PCT reference WO 99/64224.

Regarding claim 1, PCT reference '224 discloses a reinforced composite vehicle load floor of the sandwich type having a cellular core, the load floor comprising a load-bearing upper skin (150) made of a reinforced thermoplastic material; an upper skeleton frame structure (140) of reinforcing slats; a cellular core (130) made of a thermoplastic material; a lower skeleton frame structure (120) made of reinforcing slats; and a bottom skin (110) made of a reinforced thermoplastics material; the upper and lower skeleton frame structures (140 and 120) of reinforcing slats being positioned symmetrically with respect to a plane formed by the cellular core at predetermined places against the skins (150 and 110) and the cellular core (130) in Figure 1. Since PCT reference '224 discloses the reinforced composite vehicle load floor as claimed, therefore the load floor is capable of supporting 240 pounds of weight over 100 square inches without more than 10 millimeters of deflection.

Regarding claim 2, PCT reference '224 discloses the load floor wherein slats of each of the frame structures are positioned adjacent to front, back and side edges of the load floor.

Regarding claim 3, PCT reference '224 discloses the load floor wherein slats of each of the frame structures extend from positions adjacent the front, back and side edges of the load floor to a center of the load floor.

Regarding claim 4, PCT reference '224 discloses the load floor comprising at least one outer covering layer (161) made of a woven or non-woven fabric disposed on the upper skin wherein the load floor is a carpeted load floor.

Regarding claim 5, PCT reference '224 discloses the load floor wherein the load floor is substantially flat. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

Regarding claim 6, PCT reference '224 discloses the load floor. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

Regarding claim 7, PCT reference '224 discloses the load floor. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.

Regarding claim 8, PCT reference '224 discloses the load floor wherein while the load floor is being formed, the skins (110 and 150) have a forming temperature lying in the range approximately 160C to 200C.

Art Unit: 3612

Regarding claim 9, PCT reference '224 discloses the load floor wherein the skins (110 and 150) are made of a woven fabric or mat of glass fibers and of a thermoplastic composite.

Regarding claim 10, PCT reference '224 discloses the load floor wherein the reinforcing slats of the skeletal frame structures are made of reinforced thermoplastic composite.

Regarding claim 11, PCT reference '224 discloses the load floor wherein the composite is fiber-reinforced.

Regarding claim 14, PCT reference '224 discloses the load floor wherein the thermoplastics material of the skins (110 and 150) is a polyolefin and preferably polypropylene.

Regarding claim 15, PCT reference '224 discloses the load floor wherein the cellular core has an open-celled structure of the tubular or honeycomb cell type, constituted mainly of polyolefin and preferably polypropylene.

Regarding claim 17, PCT reference '224 discloses the load floor wherein the load floor is a structural component of a vehicle passenger compartment.

Regarding claims 18 and 19, PCT reference '224 discloses the load floor wherein the load floor has a substantially uniform thickness at a central portion thereof.

Regarding claim 20, PCT reference '224 discloses the load floor wherein the depth of the load floor is more than 10 times its thickness.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3612

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT reference WO 99/64224 in view of Edwards et al. 5,891,560.

Regarding claims 12 and 13, PCT reference '224 discloses the load floor.

However, PCT reference '224 does not show wherein the composite includes a depolymerizable and repolymerizable thermoplastic polymer resin (claim 12); and wherein the resin is a thermoplastic polyurethane (claim 13).

Edwards et al. '560 teach fiber-reinforced composites prepared from a depolymerizable and repolymerizable polymer having the processing advantages of a thermoset without being brittle. Impregnation of polymer into the fiber bundle is achieved, while still producing a composite with desirable physical properties and high damage tolerance.

Regarding claims 12 and 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the load floor of PCT reference '224 with the composite includes a depolymerizable and repolymerizable thermoplastic polymer resin, such as thermoplastic polyurethane, as taught by Edwards et al. '560, in order to provide desirable physical properties and high damage tolerance.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori L. Coletta whose telephone number is (703) 306-4614.

The examiner can normally be reached on Monday-Friday 6:30am-3:00pm.

Art Unit: 3612

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Lori L. Coletta*

Lori L. Coletta

Examiner

Art Unit 3612

Lori L. Coletta  
July 1, 2004